

REMARKS

Reconsideration and allowance of the present application in light of the following remarks are respectfully requested.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shibata et al., U.S. Pat. No. 6,008,539 ("Shibata"). The Applicants respectfully contend that Shibata does not teach or suggest the construction of a "flip-chip" device in which light reflected from the positive electrode layer is emitted from the device. Indeed, light reflected toward the substrate in the Shibata device will be lost, encouraging the use of the least reflective composition and the smallest possible electrode area, while in the present invention, the goal is to maximize the reflection and cover most of the chip with the electrode, see Fig. 9, to increase the intensity of the emitted light. The Applicants respectfully contend, therefore, that Shibata does not teach or suggest the claimed "flip-chip" device and cannot, therefore, anticipate the present invention. The Applicants respectfully request that this rejection be withdrawn.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(a) as being anticipated by the Kondoh et al. article (Integrated Photonics Research) ("Kondoh"). The Applicants respectfully contend that although Kondoh was apparently presented in a foreign country during late March or early April of 1998 during a Canadian conference, there is no indication that the actual *publication date* of the cited reference was prior to the May 13, 1998, priority date of the present invention. The Applicants respectfully contend that the date of the conference does not translate directly into a date of publication. The Applicants further submit that since it is the *publication* that is being applied by the Examiner, absent an indication of the date of publication, Kondoh is not a valid prior art reference against the present invention and request that this rejection be withdrawn.


Claims 3, 4, 5, 6 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibata or Kondoh as applied to claim 1 above, and further in view of Yanagihara et al., U.S. Pat. No. 5,523,623 ("Yanagihara"). The Applicants respectfully incorporate the above discussion regarding the deficiencies of Shibata and the inapplicability of Kondoh against the present invention. The Applicants respectfully submit that Yanagihara, like Shibata, does not teach or disclose the claimed "flip-chip" structure and does not, therefore, remedy the deficiencies of Shibata. Further, the Applicants respectfully note that Yanagihara is directed to the formation of an ohmic electrode on a GaAs bipolar transistor and not the claimed "flip chip type of light-emitting semiconductor device." The Applicants respectfully contend, therefore, that no motivation apart from the present disclosure has been identified for the proposed combination. The Applicants respectfully request, therefore, that this rejection be withdrawn.

Claims 7-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shibata or Kondoh and Yanagihara and further in view of Neumann et al., U.S. Pat. No. 5,614,736 ("Neumann"). The Applicants respectfully incorporate the above discussion regarding the deficiencies of Shibata and Yanagihara, as well as the inapplicability of Kondoh against the present invention. The Applicants respectfully submit that Neumann, like Shibata and Yanagihara, does not teach or disclose the claimed "flip-chip" structure and does not, therefore, remedy the deficiencies of the other references. The Applicants respectfully maintain that given the fundamentally different purpose of the contact materials in the conventional chips (substrate down) of the cited references and the claimed "flip chip," one of ordinary skill would not have been led to the present invention by the disclosures provided in the cited references. The Applicants respectfully request, therefore, that this objection be withdrawn.

In view of the foregoing, the application is now believed to be condition for allowance, and such is action is hereby earnestly solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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